N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Stu Blackburn

Title:

DIGITAL SUBSCRIBER LINE USER CAPACITY ESTIMATION

Application No.: 10/766,314

Filed:

January 28, 2004

Examiner:

Unknown

Group Art Unit: 2661

Atty. Docket No.: 1033-NW1001

COMMISSIONER FOR PATENTS

PO Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98, the undersigned brings the patents, publications, applications or other information identified in the attached:

Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/1449

Other: n/a

to the Examiner's attention in the above-identified application. Citation of such information shall not be construed as:

- an admission that the information necessarily is, or corresponds to, prior art with 1. respect to the instant invention;
- a representation that a search has been made, other than as described below; or 2.
- an admission that the information cited herein is, or is considered to be, material 3. to patentability as defined in § 1.56(b).

For each item of information listed that is not in the English language, the undersigned has provided a concise explanation of the relevance, such as through (i) an English language abstract, (ii) an English language equivalent application, (iii) reference to discussion in the application, or (iv) if cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action that indicates the degree of relevance found by the foreign office.

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as either First Class Mail or Expr Mail, in an envelope addressed to the Commissioner for Patents on

Molly K. Harrison

Typed or Printed Name

STATEMENT UNDER 37 C.F.R. § 1.704(d)

May 2	If the 29, 2000	above-identified application is an original application filed on or after):
	<u></u>	each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.
		FEES DUE
	This I	nformation Disclosure Statement is being filed:
		within three months of the filing date of a national application or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.
		before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.
		during the period specified in § 1.97(c). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application not more than three months prior to the filing of this Information Disclosure Statement.
		during the period specified in § 1.97(c). Accordingly, the fee set forth in § 1.17(p) is required and provided as shown on the attached Fee Transmittal.
		during the period specified in § 1.97(d). Accordingly, the fee set forth in § 1.17(p) is required and provided as shown on the attached Fee Transmittal. Additionally, each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application not more than three months prior to the filing of this Information Disclosure Statement.

Should any PTO fees be necessary for entry of this Information Disclosure Statement, the undersigned hereby authorizes the Commissioner to charge Deposit Account <u>50-2469</u>.

Respectfully submitted,

9-11-2004

Date

Jeffrey G. Toler, Reg. No. 38,342

Attorney for Applicant(s)

TOLER, LARSON & ABEL, L.L.P.

5000 Plaza On The Lake, Suite 265

Austin, Texas 78746

(512) 327-5515 (phone)

(512) 327-5452 (fax)

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Raperwork Reduction of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT
(Use as many sheets as necessary)

of 4

Sheet 1

Complete if Known					
Application Number	10/766,314				
Filing Date	January 28, 2004				
First Named Inventor	Stu Blackburn				
Art Unit	2661				
Examiner Name	Unknown				
Attorney Docket Number	1033-NW1001				

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	ĀA	US- 6,477,238 B1	11-05-2002	Schneider, et al.	
	ВВ	^{US-} 6,498,791 B2	12-24-2002	Pickett, et al.	
	СС	US- 6,532,277 B2	03-11-2003	Ulanskas, et al.	
	DD	^{US-} 6,507,606 B2	01-14-2003	Shenoi, et al.	
	EE	^{US-} 6,538,451 B1	03-25-2003	Galli, et al.	
	FF	^{US-} 6,724,859 B1	04-20-2004	Galli	
	GG	^{US-} 6,731,678 B1	05-04-2004	White, et al.	
	НН	^{US-} 6,697,768 B2	02-24-2004	Jones, et al.	
	11	^{US-} 6,549,568 B1	04-15-2003	Bingel	
	JJ	^{US-} 6,625,255 B1	09-23-2003	Green, et al.	
	KK	^{US-} 6,643,266 B1	11-04-2003	Pugaczewski	
	LL	^{US-} 6,668,041 B2	12-23-2003	Kamali, et al.	
	MM	^{US-} 6,782,082 B2	08-24-2004	Rahamim	
	NN	US- 6,728,238 B1	04-27-2004	Long, et al.	
	00	US- 6,640,239 B1	10-28-2003	Gidwani	
	PP	US- 6,597,689 B1	07-22-2003	Chiu, et al.	
	QQ	^{US-} 6,466,088 B1	10-15-2002	Rezvani, et al.	
	RR	^{US-} 6,769,000 B1	07-27-2004	Akhtar, et al.	
	SS	^{US-} 6,769,024 B1	07-27-2004	Natarajan, et al.	

		FORE	IGN PATENT DOCU	IMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				T,
	TT					
	UU					
	W					L
	ww					
	XX					
	YY					

			_
Examiner	Date	-	
Signature	Considered		
- 3	L		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SEP 2 4 2004

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE in Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Cor	mplete if Known	
Application Number	10/766,314	
Filing Date	January 28, 2004	
First Named Inventor	Stu Blackburn	
Art Unit	2661	_
Examiner Name	Unknown	
Attorney Docket Number	1033-NW1001	

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	ļ	Number-Kind Code ^{2 (# known)}			Tigures Appear
	AB	^{US-} 6,765,864 B1	07-20-2004	Natarajan, et al.	
	AC	^{US-} 6,751,662 B1	06-15-2004	Nararajan, et al.	
	AD	^{US-} 6,735,601 B1	05-11-2004	Subrahmanyam	
	AE	^{US-} 6,771,673 B1	08-03-2004	Baum, et al.	
	AF	^{US-} 6,765,918 B1	07-20-2004	Dixon, et al.	
	AG	^{US-} 6,763,025 B2	07-13-2004	Leatherbury, et al.	
	AH	^{US-} 6,762,992 B1	07-13-2004	Lemieux	
	AI	US- 6,775,232 B1	08-10-2004	Ah Sue, et al.	
	AJ	^{US-} 6,775,268 B1	08-10-2004	Wang, et al.	
	AK	^{US-} 6,778,525 B1	08-17-2004	Baum, et al.	
	AL	^{US-} 6,751,315 B1	06-15-2004	Liu, et al.	
	AM	^{US-} 6,754,283 B1	06-22-2004	Li	
	AN	^{US-} 6,751,218 B1	06-15-2004	Hagirahim, et al.	
	AO	^{US-} 6,667,971 B1	12-23-2003	Modarressi, et al.	
	AP	US- 6,674,725 B2	01-06-2004	Nabkel, et al.	
	AQ	US- 6,674,749 B1	01-06-2004	Mattathil	
	AR	^{US-} 6,680,940 B1	01-20-2004	Lewin, et al.	
	AS	^{US-} 6,608,835 B2	08-19-2003	Geile, et al.	
	AT	^{US-} 6,570,855 B1	05-27-2003	Kung, et al.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			Or Relevant Figures Appear	T ⁶
	AU					
	AV					
	AW					L
	AX					
	AY					
	AZ					

Examiner	<u> </u>	Date	-
Signature		Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE et of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

SEP 2 4 2004

Sheet 3

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Col	nplete if Known	
Application Number	10/766,314	
Filing Date	January 28, 2004	
First Named Inventor	Stu Blackburn	
Art Unit	2661	
Examiner Name	Unknown	
Attorney Docket Number	1033-NW1001	

			U. S. PATENT	DOCUMENTS	-
Examiner Initials*	Cite No.	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	ВА	US- 6,775,273 B1	08-10-2004	Kung, et al.	<u> </u>
				<u> </u>	
	BC	US- 6,775,267 B1	08-10-2004	Kung, et al.	
	BD	US- 5,751,338	05-12-1998	Ludwig, Jr.	
	BE	^{US-} 5,974,139	10-26-1999	McNamara, et al.	
	BF	^{US-} 5,987,061	11-16-1999	Chen	
	BG	^{US-} 6,044,107	03-28-2000	Gatherer, et al.	
	ВН	US- 6,055,268	04-25-2000	Timm, et al.	
	ВІ	US- 6,700,927 B1	03-02-2004	Esliger, et al.	
	BJ	^{US-} 6,658,052 B2	12-02-2003	Krinsky, et al.	
	BK	^{US-} 6,614,781 B1	09-02-2003	Elliott, et al.	
	BL	^{US-} 6,467,092 B1	10-15-2002	Geile, et al.	
	ВМ	^{US-} 6,317,495 B1	11-13-2001	Gaikwad, et al.	
	BN	^{US-} 6,424,657 B1	07-23-2002	Voit, et al.	
	во	US- 6,081,291	06-27-2000	Ludwig, Jr.	
	BP	US- 6,292,559 B1	09-18-2001	Gaikwad, et al.	
	BQ	US- 2004/0095921 A1	05-20-2004	Kerpez	
	BR	US-			
	BS	US-			
	ВТ	US-			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document	Foreign Patent Document Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country Code ^{3 -} Number ^{4 -} Kind Code ⁵ (if known)	MM-DD-YYYY	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Or Relevant Figures Appear	T ⁶		
	BU							
	BV							
	BW							
	ВХ							
	BY							
	BZ							

Examiner	Date	
Signature	Considered	
=		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

CANADA				e required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known			
Substitute for form 1449/PTO				Application Number	10/766,314		
INFORMATION DISCLOSURE				Filing Date	January 28, 2004		
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stu Blackburn		
(Use as many sheets as necessary)				Art Unit	2661		
				Examiner Name	Unknown		
Sheet	4	of	4	Attorney Docket Number	1033-NW1001		

SE 2 6 mg 3

	T = 0	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Examiner Initials*	Cite No. ¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	INTERNATIONAL TELECOMMUNICATION UNION, "Series G:Transmission Systems and Media, Digital Systems and Networks. Digital Sections and Digital Line System-Access Networks. Asymetric Digital Subscriber Line (ADSL) Transceivers- 2(ADSL2)," G.992.3, ITU-T. July 2002, pages 1-127.	
	СВ		
	CD		
	CE		
	CF		
	CG		
	СН		
	СІ		
	CJ		
	ск		

Examiner	Date	Į.
Signature	Considered	l .

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.